

Buckeye Fire Department Fire Prevention Division

## **ROUGH FIRE ALARM SYSTEM INSPECTION**

- 1. Inspection shall be scheduled by the fire alarm contractor.
- 2. Verify the installing contractor has a valid City of Buckeye Fire Department "Fire Equipment Contractor Permit" and "On Site Competent Person" with documentation. No fire inspections will be conducted until permit is obtained and competent person documentation is provided.
  - a. Installation of fire alarm systems includes pulling wire, installing conduit, placement of fire related boxes (fire alarm control panels, pull stations, horn strobes, detectors, etc.)
- 3. Consult approved plans and verify the following:
  - a. Proper wire type.
  - b. Proper wire gauge.
  - c. Verify that a Class 'B' fire alarm system has been installed.
  - d. Verify support of all wiring is per NFPA 72 and National Electrical Code. (Wrapping fire alarm wiring around steel nails, connecting it to ceiling grid support wires, and using metal staples are not approved methods of securing or supporting fire alarm wiring).
  - e. Verify support of conduit and back boxes, including protective bushings in conduit.
    - i. All exposed wiring installed below seven feet shall be installed in conduit.
    - ii. ALL fire alarm device components shall be installed per approved plans and NFPA 72 code requirements.
  - f. Verify location of all fire alarm system devices.
  - g. Verify that ALL notification appliances, pull stations, heat detectors, smoke detectors, and duct detector LEDs located in ALL walls and above ALL ceilings are installed with approved metal back boxes. This applies to ALL fire alarm systems installed in commercial buildings. Mud rings and plastic boxes are NOT acceptable.
  - h. Verify location of fire alarm control panel. (If fire alarm control panel is located in the same room as the fire sprinkler riser and that room has a door that provides direct access to the outside, then a graphic annunciator strip pad is not required).
  - i. Verify that the location of fire alarm control panel is in a temperature control space.
  - j. Verify location of annunciator panel or annunciator strip pad, if required.
  - k. Verify proper separation of fire alarm wiring. (A minimum of four feet separation between wiring on the horizontal runs and one foot separation on vertical runs shall be provided).
- 4. Verify that fire alarm wiring is not painted. Fire alarm wiring shall be replaced if painted.



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- 5. Verify that tamper switches are installed on ALL fire sprinkler system control valves, including control valves on outside double back flow assembly. Tamper switches shall be received in fore alarm control panel as supervisory signals on activation.
- 6. Duct detectors are required for units that exceed 2000 cfm or units that share an area that exceed 2000 cfm collectively. When duct detectors are required they shall provide the following functions;
  - a. Units shut down on activation of the duct detector.
  - b. On activation of the duct detector a supervisory signal shall be sent to the fire alarm control panel.
  - c. If a ceiling is installed, then provide an LED or at ceiling level that will light up when duct detector is activated. It is recommended to install a TEST LED.